

ABSTRACT

In case that some trouble occurs in exhaust pump or in pipe, internal pressure of groove comes closer to atmospheric pressure owing to leak-in of air, because the groove adjoins groove opened to atmospheric air. However, the internal pressures of grooves are maintained at negative value. Thus, difference in pressure between the top and bottom surfaces of moving block is generated. Further, the gap between the moving block and the intermediate block decreases. Consequently, the deterioration in the degree of vacuum in the process chamber can be retarded. During retarded time, measures to protect an object to be processed, such as operation of tightly sealing the object can be taken. Further, in case that the system recovers, time required to operate turbo-molecular pump for sucking the inside of the process chamber is reduced to a short time. Therefore, the processing can be quickly resumed.